

**Advanced Research Projects Agency – Energy Act (ARPA-E)**  
**H.R. 364**

**Rep. Bart Gordon (D-TN)**  
**Chairman, House Committee on Science and Technology**  
Introduced January 10, 2007

**Summary**

H.R. 364 establishes an Advanced Research Projects Agency for Energy within the U.S. Department of Energy. Modeled after the Department of Defense's Defense Advanced Research Projects Agency, ARPA-E is a new program charged with the mission of reducing US dependence on oil through the rapid development and commercialization of transformational clean energy technologies. This bill follows on the recommendations of the National Academy of Sciences' report *"Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future."*

**Section-by-Section**

**Section 1. Findings**

The U.S. can meet long-term energy challenges through sustained investment in energy research programs at DOE augmented by an innovative and aggressive new energy technology development effort based on the same operating principles that make DARPA successful.

**Section 2. Advanced Research Projects Agency – Energy**

Establishes the Advanced Research Projects Agency – Energy (ARPA-E) within the Department of Energy. Similar to the Department of Defense's successful Advanced Research Projects Agency (DARPA), this new organizational structure will be better positioned to support revolutionary and transformational energy research where risk and pay-offs are high.

The stated goal of ARPA-E is to reduce the dependence of the U.S. on foreign energy sources by 20% over the next 10 years. To achieve this ARPA-E should support targeted high-risk, high pay-off research to accelerate the innovation cycle for both traditional and alternative energy sources and energy efficiency. ARPA-E shall be headed by a Director, appointed by the Secretary, who will administer competitive grants, cooperative agreements, contracts or similar transactions with universities, industry and consortia which may include federal labs.

Organization of ARPA-E will be very flat and nimble to avoid bureaucratic impediments that stifle innovation today. The Director shall designate program managers who will have flexibility in establishing R&D goals for the program, publicizing goals, issuing solicitations and selecting projects for support as well as monitoring their progress. Projects will be chosen based on factors such as novelty, scientific and technical merit, applicant's capabilities and other criteria as the Director determines. ARPA-E will have authority to hire specialized science and engineering personnel to be program managers. (This is similar to DARPA and HS-ARPA.)

In addition, the Director shall ensure that ARPA-E's activities are coordinated with other federal research agencies and that ARPA-E may carry out projects jointly with other agencies.

**Section. 3. Energy Independence Acceleration Fund**

Establishes the Energy Independence Acceleration Fund administered by the Director of ARPA-E. Funding is authorized from FY 2008 thru 2013 ramping up 25 percent per year from an initial authorization of \$300 million to \$915 million.

**Section 4. Recoupment**

If a project is successful the federal government can recoup some of its original investment. The provision allows the Secretary complete flexibility in developing recoupment agreements, and the ability to waive it entirely if necessary for the commercial viability of a project. All recouped funds will be returned to the Energy Independence Acceleration Fund.

**Section 5. Advisory Committee**

The ARPA-E Advisory Committee may seek advice either from an existing DOE advisory committee or may establish a new advisory committee. If the Director of ARPA-E requires industry advice, a panel to advise on a specific technology area, or to hire an outside consultant, this provision provides the appropriate authorities.

**Section 6. ARPA-E Evaluation**

At the end of five and one-half years, the President's Committee on Science and Technology (PCAST) shall evaluate how well ARPA-E has performed in achieving its goals and mission. The Committee is required to recommend whether ARPA-E should be continued or terminated as well as lessons learned from its operation.